Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass-Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, TN 37243
(615) 532-0625

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)
STATE OPERATING PERMIT (SOP) - NOTICE OF INTENT (NOI)

Type of permit you are requesting: ☐ SOPCD0000 (designed to discharge) ☐ SOPC00000 (no discharge) ☐ Unknown, please advise

Application type: ☐ New Permit ☐ Permit Reissuance ☐ Permit Modification

If this NOI is submitted for Permit Modification or Reissuance provide the existing permit tracking number: ____

OPERATION IDENTIFICATION

Operation Name: Amanda Manning	County: Weakly
Operation Location/ Physical Address: 852 Bill Nanney Rd Dukedom TN 38226	Latitude:
	Longitude:
Name and distance to nearest receiving water(s): well	
If any other State or Federal Water/Wastewater Permits have been obtained for this site, list those permit numbers:	
Animal Type: ☑ Poultry ☐ Swine ☐ Dairy ☐ Beef ☐ Other ____	
Number of Animals: 132,000 / Number of Barns: 6 / Name of Integrator: Tyson	
Type of Animal Waste Management: (check all that apply) ☑ Dry ☐ Liquid ☐ Liquid, Closed System (i.e. covered tank, under barn pit, etc.)	
Attach the NMP ☑ NMP Attached / Attach the closure plan ☐ Closure Plan Attached / Attach a topographic map ☑ Map Attached	

PERMITTEE IDENTIFICATION

Official Contact (applicant): Amanda Manning	Title or Position: owner			
Mailing Address: 852 Bill Nanney Rd	City: Dukedom	State: TN	Zip: 38226	☐ Correspondence ☐ Invoice
Phone number(s): 731-223-1005	E-mail:			
Optional Contact: Shannon Manning	Title or Position: owner			
Address: 852 Bill Nanney Rd	City: Dukedom	State: TN	Zip: 38226	☐ Correspondence ☐ Invoice
Phone number(s): 731-223-1051	E-mail: Smanning48726@gmail.com			

APPLICATION CERTIFICATION AND SIGNATURE (must be signed in accordance with the requirements of Rule 0400-4-5-.05)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Name and title, print or type	Signature	Date
Amanda Manning owner	Amanda Manning	8/10/16

STATE USE ONLY

Received Date	Reviewer	EFO	T & E Aquatic Fauna	Tracking No.
	Impaired Receiving Stream	High Quality Water		NOC Date

Five Starr Farms
Facility Name

Declarations to Nutrient Management Plan:

By my signature below, I affirm that I have read, understand, and will comply with the following stipulations from Tennessee's CAFO regulations that apply to my CAFO operation:

1) All animals in confinement are prevented from coming in direct contact with waters of the state.
2) All chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
3) Pesticide-contaminated waters will be prevented from discharging into waste retention structures. Waste from pest control and from facilities used to manage potentially hazardous or toxic chemicals shall be handled and disposed of in a manner that will prevent pollutants from entering waste retention structures or waters of the state.
4) Chemicals, manure/litter, and process wastewater will be managed to prevent spills. Spill clean-up plans will be developed and any equipment needed for spill clean-up will be available to facility personnel.
5) All sampling of soil and manure/litter is conducted according to protocols developed by UT Extension.
6) All records outlined in the permit that I am applying for will be maintained and available on-site.
7) Any confinement buildings, waste/wastewater handling or treatment systems, lagoons, holding ponds, and any other agricultural waste containment/treatment structures constructed or modified after April 13, 2006, are or will be located in accordance with NRCS Conservation Practice Standard 313.
8) A copy of the most recent Nutrient Management Plan will be kept as part of the farm records and will be maintained and implemented as written.
9) If applicable, all waste directed to under floor pits shall be composed entirely of wastewater (i.e. washwater and animal waste).
10) The Tennessee Department of Environment and Conservation Division of Water Resources will be notified of any significant wildlife mortalities near retention ponds or following any land application of animal wastes to fields.
11) All employees involved in work activities that relate to permit compliance will receive regular training on proper operation and maintenance (O&M) of the facility and waste disposal. Training shall include appropriate topics, such as land application of wastes, good housekeeping and material management practices, proper O&M of the facility, record keeping, and spill response and clean up. The periodic scheduled dates for such training shall be identified in the current Nutrient Management Plan.
12) There shall be no land application of nutrients within 24 hours of a precipitation event that may cause runoff. The operator shall not land apply nutrients to frozen, flooded, or saturated soils.

Amanda Manning
Signature of CAFO Owner/Operator

8/10/16
Date

Nutrient Management Plan - Poultry

Exporting 100% of Litter Generated

1. Farmer/ Producer Information

Is **ALL** litter removed from your farm (i.e. you do not apply litter on your land)?*

If the answer is "No," do not complete this form.

Yes	No
Please circle one	

First Name: ~~Amanda~~ Amanda

Last Name: Manning

Farm/ Operation Name: Five Stars Farms

Tennessee County: Weakley

2. Volumes and Calculations

Poultry Type:

Broiler	Pullet	Layer
circle the type(s)		

Key

A **Number of birds per house per grow-out:** 22,000

B **Number of Houses:** 6

C **Number of Grow-Outs / Year:** 5

D **Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out *(see Table at right or use your farm average if known)*** 2.4

The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house. Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.

Type of Bird	Market/ Mature Weight (lbs)	Avg. Weight of Litter Produced (lbs)/ Bird / Grow-Out
Broilers	small (3.8 - 5 .8)	2.1
	large (5.9 - 7+)	2.4
Layer	8 - 12	8
Pullet	5.5	3

*Take **Bolded** Letters in **Key** Column Above and Below to Assist in Calculating Values Below*

Number of Birds per Grow-Out = A x B = 132,000

Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then:
22,000 X 2 = 44,000 number of birds

KEY

E **Number of Birds per Year** = A x B x C = 660,000

Number of Birds per Year Example: If A = 22,000 and B= 2 and C = 5.5 then:
22,000 x 2 x 5.5 =242,000 number of birds per year

Total Tons of Litter Produced per Year on the Farm = E x D / 2,000 = 792

Tons of Litter Produced Example: If E = 242,000 and D = 2.1 lbs. then:
242,000 x 2.1 lbs = 508,200 lbs. / 2,000 = 254 Tons

Nutrient Management Plan - Poultry

Exporting 100% of Litter Generated

2. Litter Handling and Storage

Litter Storage Capacity

Key			
	Storage Capacity within Poultry Houses (cu ft) 8600	**No. of Houses** 6	
	Length of poultry house (ft) X Width of poultry house (ft) X Height of litter (ft) = cubic feet of storage		
A	**Total capacity within poultry barns (cu ft) X number of barns**	51,600	*cu ft*
	Storage Capacity within Litter Sheds (cu ft) 40320	**No. of Sheds** 1	
	Length of litter shed (ft) X Width of litter shed (ft) X Height of litter (ft) = cubic feet of storage		
B	**Total capacity within litter storage sheds (cu ft) X number of sheds**	40320	*cu ft*
C	**Storage Capacity of Other Storage Areas, if Applicable (cu ft)**	N/A	
	Total Litter Storage Capacity Onsite (A + B +C)	91980	*cu ft*

Litter Contents from Manure Analysis (*as is basis*)*

** Manure analyses will be performed annually, and the results will be provided to all parties removing litter from my farm or operation.*

Laboratory Name	House	Date of Analysis	Total N	P_2O_5[a]	K_2O[b]	Units
						lbs./Ton
						lbs./Ton
						lbs./Ton
						lbs./Ton

Attach laboratory results. If a new facility, provide the source of the estimates used.

Notes:
N = Nitrogen P_2O_5 = Phosphorus Oxide K_2O = Potassium Oxide
[a] If Phosphorus is expressed in analyses as Phosphorus (P), simply multiple P lbs. X 2.3 to convert to P_2O_5.
[b] If Potassium is expressed in analyses as Potassium (K), simply multiple K lbs. X 1.2 to convert to K_2O.

Mortality Management

Dead birds will be disposed of according to State and local laws in a way that does not adversely affect groundwater or create public health concern. All mortalities will be disposed of using:

Composting	Incineration	Rendering*	Other:

please circle one

**If rendering, include the name and address of renderer.:*

_____

Closure Plan

In the event that poultry production at this location ceases, the following will bedone in 360 days:

- Any litter/ compost currently in storage at the time of closure will be removed and spread elsewhere according to my current NMP.
- All litter in houses will be removed and spread elsewhere according to my current NMP.
- The most current manure analysis performed by an accredited laboratory will be provided to anyone removing litter on my farm.
- Any dead birds in the houses at the time of closure will be disposed of according to my NMP.

Nutrient Management Plan - Poultry

Exporting 100% of Litter Generated

3. Best Management Practices/Conservation Practices

Best Management Practices/Conservation Practices for Production Areas

The following site-specific Best Management Practices (BMPs) and conservation practices will be implemented to minimize environmental impacts in production areas (*please indicate all that apply*). The design and implementation of the BMPs will meet minimum standards set in the NRCS Field Office Practice Standard and/or the NRCS Animal Waste Handbook.

- [ ] Buffer strips/filter strips
- [ ] Silt fencing, riprap, stone gabions, or other structural erosion control
- [x] Maintain roads and heavy traffic areas
- [x] Proper manure/litter storage (i.e. under cover, prevents runoff)
- [x] Balanced diet/ration to prevent excessive nutrients in manure/litter (Tyson)
- [x] Regular inspections and maintenance of structures and equipment
- [x] General housekeeping (i.e. cleanup of waste/litter spills during transfers)
- [ ] Other (*please describe in detail below, or attach additional pages as needed*):

Diversion of Clean Water

I certify that:

- Uncontaminated stormwater runoff shall be diverted away from manure, litter, process wastewater, waste
- Clean water will be diverted , as appropriate, from the production area.
- Please provide a brief explanation/description of how clean water will be diverted below:

Poultry houses are on elevated pad, Diverson Ditch on North side of Houses, Diverson Ditch on North side of litter shed

Facility Maintenance

The following maintenance activities will be performed at the facility (*please indicate all that apply*):

- [x] Regular inspections, maintenance, and repair of structures, equipment, and vehicles
- [x] Replacement and upgrade of structures, equipment, and vehicles as needed
- [x] Regular training of facility personnel in maintenance/housekeeping techniques
- [x] Maintenance of vegetation (i.e. mowing, weeding, seeding)
- [x] Other (*please describe in detail below, or attach additional pages as needed*):

Make sure Diverson ditches are Clean

***If your facility has a separate Operation and Maintenance (O&M) Plan, please attach a copy.**

Nutrient Management Plan - Poultry

Exporting 100% of Litter Generated

4. Checklist

Use this sheet to help ensure that you have included all required items in order for your CAFO application and Nutrient Management Plan to be approved. Please attach the following items to this worksheet to complete you CAFO permit application.

✓ **Forms**

- Signed revised Notice of Intent Form
- Signed Declarations to Nutrient Management Plan

✓ **Maps**

- Full color map of Farm/ Operation Showing the Location of Barns/ Houses, Compost Bins, Litter Storage Bins, Nearby Roads, Streams, Wetlands, etc.

✓

- Full color topographical map of the Farm/ Operation showing property lines and location of poultry houses.

✓ **Manure Analysis**

- Annual Manure Analysis Performed by an Accredited Laboratory

Mail complete packet to:

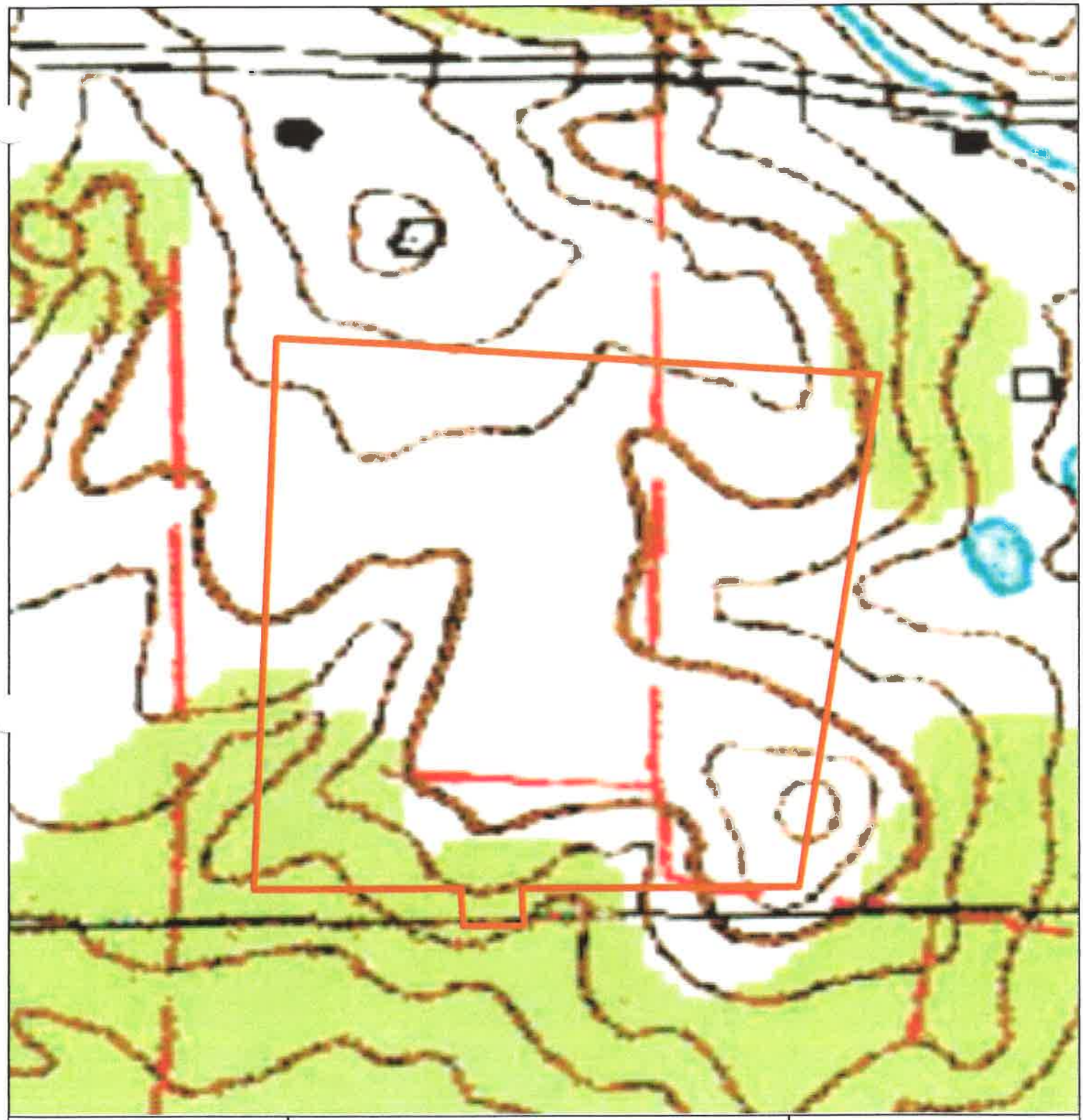
Heidi McIntyre-Wilkinson, Environmental Specialist
Ellington Agricultural Center - Holeman Building
Nonpoint Source and CAFO Programs
P.O. Box 40627
Nashville, TN 37204

The completed packet can also be scanned and sent via electronic mail to:
Heidi.McIntyre-Wilkinson@tn.gov

5. Certification

As the owner/operator, I am certifying that I am the decision-maker for this operation. All information included in my CAFO permit application packet is complete and accurate to the best of my knowledge. I understand that I am responsible for the implementation of the NMP and for maintaining all necessary records for the operation.

Signature: Amanda Manning Date: 8/10/16



LEGEND

Property Boundaries

N
W E
S

0 0.01250.025 0.05 Miles

5 STARR FARM
AMANDA MANNING
852 BILL NANNY ROAD
DUKEDOM, TN 38226

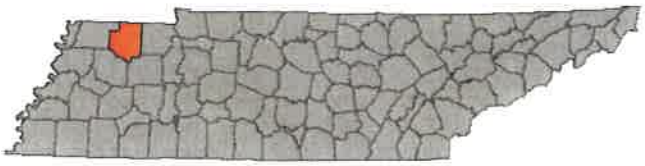
SOPC00104

LEGEND

Property Boundaries

N
W E
S

0 0.01250.025 0.05 Miles



5 STARR FARM
AMANDA MANNING
852 BILL NANNY ROAD
DUKEDOM, TN 38226

SOPC00104

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

LAND APPLICATION ANALYSIS

Client :
Five Starr Farms
Mr. Shannon Manning
852 Bill Nanney Road
Dukedom , TN 38226

Grower :
Analytical Testing

PO :

Report No: 16-252-0306
Cust No: 21114
Date Printed: 09/21/2016
Date Recd : 9/8/2016

Page : 1 of 1

Lab Number : 95545 **Sample Id :** M-3

Test	Analysis		Pounds Per Ton	
	As Received	Dry Basis	As Received	Dry Basis
Nitrogen, N %	3.38	5.87	67.6	117
Ammoniacal-N				
Phosphorus, P %	1.12	1.94	51.5 P_2O_5	89.4
Potassium, K %	1.88	3.26	45.1 K_2O	78.3
Sulfur, S %	0.566	0.982	11.3	19.7
Magnesium, Mg %	0.478	0.829	9.56	16.6
Calcium, Ca %	3.26	5.66	65.2	113
Sodium, Na ppm	4360	7570	8.72	15.1
Iron, Fe ppm	4930	8560	9.86	17.1
Aluminum, Al ppm	3550	6160	7.10	12.3
Manganese, Mn ppm	369	641	0.738	1.28
Copper, Cu ppm	68.4	119	0.137	0.238
Zinc, Zn ppm	239	415	0.478	0.829
Boron, B ppm	28.4	49.3	0.056	0.098

Test	Result
Moisture %	42.4
Solid %	57.6

Additional Information	Result
Type	Dry Basis

Additional Tests	Result
Digestion ,	Digested
Total Chromium , mg/Kg	7.58
Total Nickel , mg/Kg	8.07
Total Lead , mg/Kg	2.57
Total Cadmium , mg/Kg	0.188

Comments :

RMMA Recommended Methods of Manure Analysis, Peters et al, 2002, In Press

SW USEPA, SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, 3rd Ed. Current Revision

Oscar Ruiz